

Customer No. 25280

Case No. 2130

REMARKS35 USC Section 102 Rejection:

Claims 29-31, 33-41 and 43-48 were rejected under 35 U.S.C. 102(a) as being anticipated by Yokozeki et al. (US 5,981,063).

As regards independent claim 29, the Examiner submits that Yokozeki discloses the instant invention with the exception of "at least one portion of said treated substrate retains at least about 50% of said finish after 10 washes as performed in accordance with the wash procedure of MTCC Test Method 130-1981." The Examiner presumes that this limitation is inherent to the invention based on the use of similar materials.

As regards independent claim 39, the Examiner submits that Yokozeki discloses the claimed invention with the exception of a treated substrate "wherein said at least a portion of the surface of said treated substrate exhibits a) a log kill rate for *Staphylococcus aureus* of at least 1.5 and b) a log kill rate for *Klebsiella pneumoniae* of at least 1.5, both as tested in accordance with AATCC Test Method 100-1993 for 24 hour exposure, and c) retention of at least about 50% of said treatment, all after at least 10 washes, said washes performed in accordance with the wash procedure as part of AATCC Test Method 130-1981." The Examiner presumes that this limitation is also inherent to the invention based on the use of similar materials.

Applicants have amended independent claims 29 and 39 to include the limitation that the binder material is selected from the group consisting of melamine-formaldehyde resins, acrylic resins, permanent press resins, polyvinyl chloride/vinyl copolymers, ethoxylated polyester, and mixtures thereof. Support for this amendment is found in the specification beginning with the last paragraph on page 14 and continuing to the top of page 15. Further support is also found in the "Description of the Preferred Embodiments," which begins on page 21. For instance, ethoxylated polyester is disclosed as "PD-92" (available from Milliken Chemical) on page 29. Mixtures of PVC and acrylic binders are disclosed on page 22.

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Applicants respectfully submit that Yokozeki fails to disclose a binder material selected from the group consisting of melamine-formaldehyde resins, acrylic resins, permanent press resins, polyvinyl chloride/vinyl copolymers, ethoxylated polyester, and mixtures thereof. Rather, with regard to binder materials, Yokozeki discloses:

"...the metal ion-holding inorganic particles may be allowed to be contained in a fiber, or may be deposited on a fiber by using a binder (e.g. an adhesive resin) so that they do not detach" (col. 3, lines 41 – 43).

Yokozeki further discloses:

"..when a natural fiber is used as the fiber, it is preferable to deposit a pyroelectric substance and/or metal ion-holding inorganic particles on the natural fiber by the use of a binder (e.g. as an adhesive resin) because, as mentioned previously, it is difficult to allow the substance and the particles to be contained in the natural fiber" (col. 7, lines 38 – 44).

These two citations are the only teachings by Yokozeki of the use of a binder material. Yokozeki fails to teach any specific binders. None are disclosed in Examples 1 – 8, and none are disclosed in Comparative Examples 1 – 9. Thus, while Yokozeki discloses the use of a binder for natural fibers, the reference fails to provide any teaching of specific binder materials which may be employed.

In contrast, Applicants have claimed certain binder materials which were determined to provide the desired wash durability and antimicrobial effectiveness to the treated substrate. Applicants disclose, on page 13 of the specification, that three very specific criteria must be met by the binder material in order for it to function as part of the finish of the current invention. Briefly, these criteria are: (a) the binder must not be readily soluble in water; (b) the binder must not be susceptible to attack by standard and/or industrial detergents, solvents, and/or bleaches; and (c) the binder must not melt upon exposure to drying temperatures. Applicants respectfully submit that Yokozeki fails to disclose a binder material that exhibits these features and further submit that Yokozeki fails to provide any examples of binder materials whatsoever.

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Thus, since Yokozeki fails to teach each and every limitation of Applicants currently claimed invention, reconsideration and withdrawal of this rejection is respectfully requested.

35 USC Section 103 Rejection:

Claims 32 and 42 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Yokozeki et al. (US 5,981,063) in view of Sawan et al. (US 5,849,311).

The Examiner submits that while Yokozeki teaches the use of fibers as a substrate, no disclosure is provided to teach the use of a film substrate and looks to Sawan to supply that teaching. Thus, the Examiner contends that it would have been obvious to one of ordinary skill to have employed the binder and antimicrobial metal ion generating material disclosed by Yokozeki et al. to make a film substrate that can be ground down to form an antimicrobial powder suitable for use in antimicrobial creams.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art (MPEP § 2143.03). Applicants respectfully submit that the cited references in their entirety fail to teach or suggest the invention as claimed.

Applicants rely, in part, on the discussion presented above with regard to the failure by Yokozeki to provide sufficient teachings of binder materials. As a result of this deficiency of Yokozeki, Applicants respectfully submit that one of ordinary skill in the art would not be able to look to the teachings of Yokozeki and Sawan and choose a binder material – a binder material selected from the group consisting of melamine-formaldehyde resins, acrylic resins, permanent press resins, polyvinyl chloride/vinyl copolymers, ethoxylated polyester, and mixtures thereof – that could be combined with an antimicrobial metal ion generating material to form the finish applied to the selected substrate.

Moreover, the references fail to recognize the existence of the criteria that must be met in choosing a binder material which will provide the desired wash durability and

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antimicrobial effectiveness disclosed and claimed by Applicants. Applicants have disclosed in great length and in great detail (in the specification on pages 13 – 14) the fact that any "adhesive resin" (as disclosed by Yokozeki) is not acceptable for use in the finish of Applicants' invention.

Thus, Applicants respectfully submit that the combination of Yokozeki et al. in view of Sawan et al. provides no teaching or suggestion to support a finding of *prima facie* obviousness. Thus, Applicants respectfully request reconsideration and withdrawal of this rejection.

Conclusion:

For the reasons set forth above, it is respectfully submitted that all claims now stand in condition for allowance.

Should any issues remain after consideration of this Amendment and accompanying Remarks, the Examiner is invited and encouraged to telephone the undersigned in the hope that any such issue may be promptly and satisfactorily resolved.

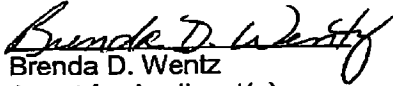
To any extent required for acceptance of this paper, an extension of time is hereby requested.

In the event that there are additional fees associated with the submission of these papers (including extension of time fees), authorization is hereby provided to withdraw such fees from Deposit Account No. 04-0500.

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Respectfully submitted,


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